

Notice of Allowability

Application No.

09/691,957

Examiner

Brian J. Sines

Applicant(s)

SCHAEVITZ ET AL.

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the response filed 1/24/2005.
2. ☒ The allowed claim(s) is/are 3,5,8,10,11 and 17.
3. ☒ The drawings filed on 30 July 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments and amendments, filed 1/24/2005, with respect to each of the rejections in the office action, mailed 11/2/2004, have been fully considered and are persuasive. These rejections have been withdrawn.

Allowable Subject Matter

Claims 3, 5, 8, 10, 11 and 17 are allowed.

The following is an examiner's statement of reasons for allowance:

Warner et al. (U.S. Pat. No. 5,604,130 A) teach an apparatus (20) comprising: a substrate (multiwell plate 24) comprising a planar surface and at least one microfluidic unit formed therein, wherein each microfluidic unit comprises at least one reservoir (well 26) with an opening in the surface, such that the opening is surrounded by a collar in relief (ridges located at 28; figure 5B), wherein the collar is covered with a lid structure (cover 34 & pad 40; figure 5A) composed of a deformable material (see col. 1, line 65 – col. 2, line 51; col. 3, line 21 – col. 6, line 59; figures 1, 5A & 5B).

Kolb et al. (U.S. Pat. No. 5,961,926 A) teach an apparatus (microplate assembly 10) comprising: a substrate (collimator 18) comprising a planar surface and at least one microfluidic unit formed therein, wherein each microfluidic unit comprises at least one reservoir (well 48) with an opening in the surface, such that the opening is surrounded by a collar in relief (upper rim 49), wherein the collar is covered with a lid structure (cover film 20) composed of a deformable material (see col. 3, line 25 – col. 6, line 54; figures 1 & 2). Kolb et al. further teach

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that the apparatus is made of a plastic material (see, e.g., col. 3, lines 59 – 63; col. 5, lines 21 – 24).

Regarding claim 3, the cited prior art neither specifically teach nor suggest the further incorporation within either the apparatus of Kolb et al. or Warner et al. a collar having a thickness of from about 0.05 to 0.5 mm thick extending away from the inner surface of the opening.

Regarding claim 17, the cited prior art neither specifically teach nor suggest the further incorporation within a microfluidic apparatus one or more operational units each comprising at least two reservoirs connected by at least one microchannel in the substrate, wherein each of the reservoirs has an opening in the planar surface and a volume in the range of about 10 nl to 10 μ l; and wherein each opening has an inner surface aligned with an inner surface of the reservoir and the collar having a height in the range of about 0.1 to 1 mm and a thickness of from about 0.05 to 0.5 mm thick extending away from the inner surface.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

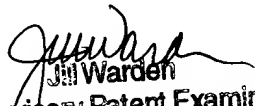
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Sines whose telephone number is (571) 272-1263. The examiner can normally be reached on Monday - Friday (11 AM - 8 PM EST).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jill Warden
Supervisory Patent Examiner
Technology Center 1700